

Glacial - Alluvium Aquifer

US EPA RECORDS CENTER REGION 5



550917

Doc: The site is underlain by approximately 100' of Mississippi River Alluvium and Glacial outwash. It appears there is approximately 50' of river alluvium, mostly poorly sorted sand, silt, and clay containing local deposits of sandy gravel, overlying glacial outwash of the Henry Formation, approximately 50' thick. The Henry Formation consists generally of well sorted sands and gravels with minor beds of silt.

Ref: ISGS, Thickness of Glacial Drift in Illinois Map, 1975.

ISGS, Quaternary Deposits of Illinois Map, 1979.

~~ISGS, Geologic Map of Ill, 1967.~~

ISGS, Groundwater Geology in South-Central Illinois, Circular 225, 1957.

* No karst terrains exist within the 4 mile TDL.

Ref: USGS, 7.5' Quad Topo, French Village, Granite City, Cahokia, and Monks Mound.

* Thickness of lowest hydraulic conductivity is thought to be the 50' of river alluvium with a conductivity value of 10^{-6} obtained from the HAS Final Rule Table 3-6.

Mississippian Limestone Aquifer

Loc: Lying directly beneath the Glacial Alluvium Aquifer is ~~the~~ ~~area~~ approximately 600' of limestone, dolomite, and shale. Considered ^a dependable aquifer for small

to medium supplies. This aquifer lies directly below the unconsolidated sediments only in the river flat areas of east St. Louis. Pennsylvanian and upper Mississippian formations lie beneath glacial drift ~~west~~ ~~or~~ east of the bluffs.

Ref: ISGS, Geologic Map of Ill,
1967.

ISGS, Groundwater Geology in
South-central Illinois, Circular 225,
1957.

There has been documented releases of sulfuric acid and hydrochloric acid from the various tanks' ancillary equipment (piping and other associated containment structures).